

ABSTRACT OF THE DISCLOSURE

There is disclosed novel *Phellinus linteus* Yoo. This mushroom is identified as novel as analyzed by restriction fragment length polymorphism and by microbiological features. A polysaccharide substance isolated from the fruiting bodies or mycelia the strain and other *Phellinus* spp. has an anticancer activity by inciting the cytotoxicity of T-cells and the antibody forming potency of B-cells. Also, the polysaccharide substance shows a potent activity against cancer metastasis. The polysaccharide substance, which can stimulate the immunity of the body, may be effective in the prophylaxis and treatment of immune-related diseases, such as cancers and AIDS, and in the study on the basic mechanism of the diseases.